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ABSTRACT

This 3-section guide was compiled to provide assistance to teachers who want to work with video in the classroom, and also to relate the experiences of students and teachers who participated in the video project, "Ptarmigan TV." The first section describes the significance of using video in the classroom and explains what video is and does, how it can enhance curriculum and general education, and its limitations. The second section, "What We Learned from Ptarmigan TV," focuses on one specific project from which teachers and students in four separate school districts were able to apply the theoretical advantages of learning with video in real-life situations. Section three comprises technical information to assist the teacher in video production. Appendices include illustrated definitions of video terms and samples of storyboarding, a release form, and a tape review form; a bibliography on instructional resources; two possible sources of funding; and a list of depositories for Ptarmigan TV materials. (Author/CMV)

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A Teacher's Guide to Video

by the

Ptarmigan TV Project Staff

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September 1979

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Preface

This guide was compiled in order to provide assistance to teachers who want to work with video in the classroom and also to relate the experiences of students and teachers who participated in a recently completed video project, "Ptarmigan TV." The guide is divided into three sections. The first section describes the significance of using video in the classroom and explains what video is and does, how it can enhance curriculum and general education, and the limitations for which the students and teachers must be prepared. The second section, "What We Learned from Ptarmigan TV," focuses on one specific project from which four separate school district's teachers and students were able to apply the theoretical advantages of learning with video in real-life situations. The third section comprises technical information to assist the teacher who believes that another method of learning merits some investigation and experimentation.

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September, 1979

SECTION I:

VIDEO AND THE LEARNING PROCESS

Introduction

Video comprises a process for students to learn content and gain skills. The finished video tapes of a project are not the end product, but rather a by-product of the learning process. The comments contained in this guide are for teachers whose purpose is to use video for teaching students content and skills and are not directed toward producing a sophisticated TV program.

Expectations

Decide what you, the teacher, want video to do for your students and determine the kinds of demands you're going to make of the equipment and of the students. As the complexity of the productions increases, the equipment demands will correspondingly increase. If you're just recording students making presentations in speech class, your needs are simple. Teach three or four of your students how to run the video tape recorder (VTR), how to connect the necessary cables to the camera, and some basic maintenance for the equipment. Through trial-and-error, your students can figure out the rest. This type of video production is easiest because there is no pre- or post-production involved; you just set up and "shoot." This should suffice as a way of documenting and then analyzing the tape contents.

If the tapes are to be shown in your community and in an exchange classroom, the content is the primary thing your viewers see. If the strength of your content is sufficient, technical flaws will pass unnoticed. However, if the content is poor, everyone will see all of the technical errors--not because they are any more evident, but because you will have lost the viewers' concentration on the subject.

To alleviate some of the potential problems in your initial video project, have your students identify the purpose of each tape. Once the purpose is discussed adequately and defined so that everyone on the production crew understands it, the work follows in a very logical progression. This applies for the simple as well as the most complex productions. However, keep in mind that on more elaborate productions you will need to have the necessary equipment or be able to improvise in order to overcome any problems. Do you have sufficient power for shooting outside? Is there enough light in the building for your camera to operate effectively? Will your single microphone pick up the voices of people seated around the table? These and other considerations are more fully explored in Section III of this guide.

Uses of Video

Teaching video in Alaska is not easy: You have to contend with an extreme climate, the high cost of equipment and materials, poor communications, irregular postal service, and, frequently, no qualified repair personnel within hundreds of miles. As dark as that picture is, the optimistic side is at least as persuasive. Teaching video in Alaska can be a way to bring your whole community closer together and can be an influence in solving local problems. You may very well have access to the entire community as an audience if you have a public-access channel or mini-watt transmitter. And it can mean that your students will learn a new way to express themselves and their viewpoints. Students may gain new perspectives and establish control over television in contrast to the current status in which television maintains control over them.

One initial consideration prior to your working with video is that you recognize the extensive amount of patience this endeavor requires. You'll also need perserverance; and you'll need to trust your students. Students seem to learn video best when they can learn from their mistakes. Are you willing to allow *every* student in your class to work with your new $5,000 color camera? Ask yourself this important question before you proceed.

To be successful, you should make sure that your administration trusts you and has confidence that you can handle what you're attempting to do. It's important to have a flexible source of funds for maintaining your equipment, buying replacement or new parts, and miscellaneous expenses, such as a new battery for your microphone, an extension cord, press-on type for graphics, lens paper for the camera lens, and the like. Ask your principal to set aside a small fund for such purposes, or petition the school board for their assistance in establishing and replenishing such an account. (A few grant sources for obtaining funds are listed in the Appendix.)

Video tape can easily be put to use in academic areas. Students in English classes can write scripts or plays of their own to tape, or they can organize dramatization of published plays or short stories. Commercials can be utilized for illustrating how to communicate through brief-but-effective means. Science class students can document lab experiments, and with a special close-up lens attachment, microscopic phenomena can be seen by a whole class on the TV monitor and the tape kept for future use.

Phenomena which occur outside of the classroom, such as ice fog and the aurora, can be taped for use in class. Field projects, such as visits to mining excavations, the weather station, or fisheries plants can also be taped. Students can make tapes of local flora and fauna and sequentially tape long-term maturation processes such as flowers blooming, plants growing, and the metamorphosis of caterpillars into butterflies.

In social science and history classes students can make tapes of community history. Local ceremonies and traditional rituals, as well as political meetings, can be recorded. If the tapes are to be broadcast, the students should be aware of the Fair Use Doctrine.

One of the most rewarding experiments of *Ptarmigan TV* (see Section II) involved a group of students interviewing older residents of their town for insight into the way life once was in the area. The conversations and stories provided some excellent interviews and proved to be an invaluable experience for the students. This process of learning through the experiences of others can be readily transferred to the students' school situation. Students may make tapes that explain school life to younger students who are about to enter junior high or high school. Activities, academic programs, athletics, teachers and staff, dress, social customs, and the like can be recorded for sharing with the younger students.

Foreign language instruction could benefit considerably from video tape use. Students may record their own individual and group conversations and analyze the tapes for voice diction, pronunciation, inflection, and for body language in relation to the spoken words.

Video tape as an art form is being used in elementary and secondary schools. Local and state Arts Councils have assisted schools in introducing visiting video artists into classrooms if that capability doesn't exist within the school system.

Numerous class disciplines can profit from the incorporation of video tape, but it takes a good deal of planning to produce a usable tape. Only two or three students need to have mastery of the equipment, but the greater their understanding of both the subject matter and the technical possibilities of video, the more successful the final tape will be.

The most elaborate use of video tape is to start a full-fledged video class. This will involve such projects as interviews, animation, complete programs, producing the news on a semi-regular basis, advertisements for local events, etc. Your planning for such productions must begin long before the class begins. The following suggests methods for approaching the process of learning through video; in most cases, these methods have been tested for validity, but should not limit the experiments other teachers wish to explore.

Suggestions for Video Production

*Set your goals; determine the skills you and your students need to learn and set a rough time frame for accomplishing those goals during the semester(s). Don't feel you have to adhere strictly to this schedule, but it does provide you with a frame of reference. Work toward improving the quality of the students'

work rather than strictly producing a set number of tapes.

*Restrict the size of your class to match the amount of equipment available. If you have only one or two cameras and VTRs, ten seems to be the optimum number for effective teaching.

*Arrange for two-hour labs, three days a week, rather than one-hour daily classes. It takes 15 minutes to get organized each class period and another ten minutes to put things away; any travel time for a shoot needs to be included, too.

*Decide who in the school has responsibility for the equipment. If the coach needs it every afternoon to tape the basketball team, does that leave any time for you and your students? And if the equipment is shared, who has the responsibility to maintain it and to pay for repairs?

*Arrange to hold classes in a room with sufficient security to lock up the equipment. The room should be well-lit for shooting purposes and quiet enough to serve as a recording studio.

*Arrange for transportation to remote shoots: depending on your school's policies on insurance, you may need to do some preparation here, too.

*Think about what you can do with the half of the class that stays behind when the other half is working out of school. If you take all ten students on the shoot, five will have nothing to do. Consider having them log previously recorded material at school, research subjects for the next tape, perform maintenance on the unused equipment, or evaluate and critique other tapes.

*Don't let your fellow teachers or administrators talk you into taping unless you're sure the tapes will have a use. Don't waste your time and the students' time by tying up the equipment or tape stock with useless recordings. Remember that video cannot improve poor materials: a dull lecture, a basketball game shot with poor lighting, and the visiting dignitary's unprepared remarks will not improve on video tape.

*Consider your audience and how you can get your work shown. The best possible situation is to have access to whatever broadcast station serves your area, and get your tapes on it at regularly scheduled times each week. If your community doesn't have a

mini-watt transmitter or public-access channel, set up special showings in the school or community center. The more visible you are, the more people will understand what you are doing, which in turn will make it easier to get permission for more elaborate productions requiring the cooperation of people outside the school.

*Try to find another school with which to exchange the tapes. You and the students will learn about another place and group of people, and it lends your productions a more objective and clearer perspective when they are designed for a distant audience. It also helps relieve the feeling that your students are isolated in their efforts. And it is an extremely valid method for sharing new ideas.

*Finally, don't set your standards impossibly high. You don't have millions of dollars and 40 hours a week to invest in making your tapes look like CBS's. Keep in mind that you are working with students who have a limited amount of time for your class, and that you have a limited amount of equipment. Don't settle for less than your students' best, but be realistic about the classroom limitations.

Video Skill-building Exercises

These are a few exercises to help build the students' organizational and analytical skills before they pick up the video camera. Use the ones with which you feel most comfortable, but don't limit yourself to this brief list.

*Analyze network TV programs for content and structure. How well does a particular program use the television medium? (This will involve student research of television.)

*Choose any network TV program. Turn down the audio and watch the program; then turn the brightness control all the way down until the picture goes black. At that point, turn up the sound and have your students decide whether audio or video communicates more information.

*Check the camera placement during the commercial TV programs and how it moves to follow or lead the action. Point out the different kinds of camera shots, i.e., close-up, medium shot, long shot, pan, tilt, zoom (see illustrations of Video Terms in Appendix A).

*Count the number of edits (cutting from one shot to another) in 60-second periods.

*Storyboard a commercial or public service announcement. Storyboarding is a static means of sequencing action so you know what is happening in both the audio and visual parts of the production in its developing state. (See illustration in Appendix A.)

*Have the class do a storyboard of their own commercial or stories. This is an excellent way to help students learn to visualize the whole production, to organize it, and to understand how to communicate these ideas to the rest of the video production crew.

*It's possible to do some elementary animation using the "pause button" on your VTR, making people or objects appear and disappear from a scene. Try cutting figures from colored flannel and moving them about on a flannel board background; clay models can also be variously positioned so that animation techniques can be employed.

*Experiment with the "audio dub" mode on the VTR, adding music or narration over pre-recorded video. Try taping commercials off the television set, then adding your own new sound track.

*It's possible to get some interesting new material by connecting the camera to the monitor and pointing the camera directly at the screen so that you form a visual loop whereby the signal continues to feed back on itself. This process is called "video feedback" and is analogous to the phenomenon of audio feedback which you will frequently experience. Such experimentation with video feedback will not harm the camera nor the monitor.

Logistic Considerations

Try to keep your initial productions confined to a manageable size, i.e., short duration, few locations, etc. Shoot some of the materials your class has storyboarded and have the students perform in the various roles so that they have an opportunity to become comfortable with the equipment and the idea of working as a team.

As your students gain more of an understanding of what is involved in video production, try producing longer tapes which require edits. For example, turn off the camera and set it up in another location or at a different angle while you're shooting the same scene.

Tapes can be autobiographical, or interviews, or documentaries of someone or some event. To allow the students a

greater range of subjects to tape, it would probably help, at this point, to get the students and their equipment out of the classroom and into the community.

Depending on your particular circumstances, you may want to try your hand at doing a regular community news show which can be aired for the rest of the community. This public service can make your efforts visible to the general public and can be a real point of pride for your students. But you also need to decide if your class wants to commit its time and equipment to such an activity. If this community service is provided over a year's time, what happens when the class ends? Does the news end just as abruptly? Do you have an obligation to pick up again next semester, thereby limiting your video production options? The town of St. Paul, discussed in Section II, was faced with the loss of the news show at the end of the school year; the problem was solved, however, when the city government asked the students to continue their weekly newscasts throughout the summer.

The sooner the video work is shown to the community through PTA meetings, mini-watt TV, or public showings, the more impact it will have on all concerned. If you interview someone, play back the tape for them immediately. Let the persons interviewed decide whether the interview is to be used. Remember that they are doing you and your students a favor by giving of their time, and you *must* respect their wishes.

Make sure your students learn how to visualize the proposed program; how to communicate it to the crew, and how to put the program on video tape. The students will then be ready for almost anything; however, don't let your plans become too grandiose inasmuch as students tend to become discouraged when a project proves unmanageable or proceeds too slowly. There will be enough small, irritating problems with which to contend at this point. For instance, you'll spend all afternoon taping an interview only to discover, when you're reviewing the tape back at school, that the microphone was unplugged or the camera person forgot to color balance the camera and all the people's faces look like a display of aurora borealis. These things occur with stunning regularity; keep in mind that each mistake is a valid experience.

After your students have learned to operate the equipment, allow them to experiment on their own by making personal tapes. One cooperating teacher in the *Ptarmigan TV* project trusted her junior high school students enough to allow them to take the equipment home to produce tapes of a personal nature. This experience allowed the students to develop skills in handling non-studio shooting situations.

Teachers should work around any limitations involved in beginning a new video class. The problems encountered in initiating a new class could give the average teacher enough of an excuse to start nothing new; for the special teacher, these problems become subordinate, minor details to overcome in providing students with another way of learning.

There is a special synergy which develops while the video tapes are being made. The combined interest, enthusiasm, and excitement of the group is unique and rewarding. However, there will be times when everyone is "down," and as all teachers already know, no amount of cajoling or threatening will help motivate them. We all have such days and the teacher of video should recognize that the students will have them, too.

While researching materials which may be used in your video tapes, you may occasionally find one-of-a-kind resources, items which are especially significant to the history of your community. At that point, take time to discuss with your students the roles of such institutions as archives, museums, and the purposes of historic preservation. It is at moments like these that students begin to understand why history is valuable to society. And it is at such points that students can understand why an archeologist sustains an interest in "dumb old bones" for a lifetime, or why a professor delights in old manuscripts. They may even come to understand why citizens shouldn't take souvenirs home from historic sites.

Non-Video Supplementary Activities

There are a number of supplementary activities which the students can do without using the video tape equipment and which will enhance their video tape work. For example:

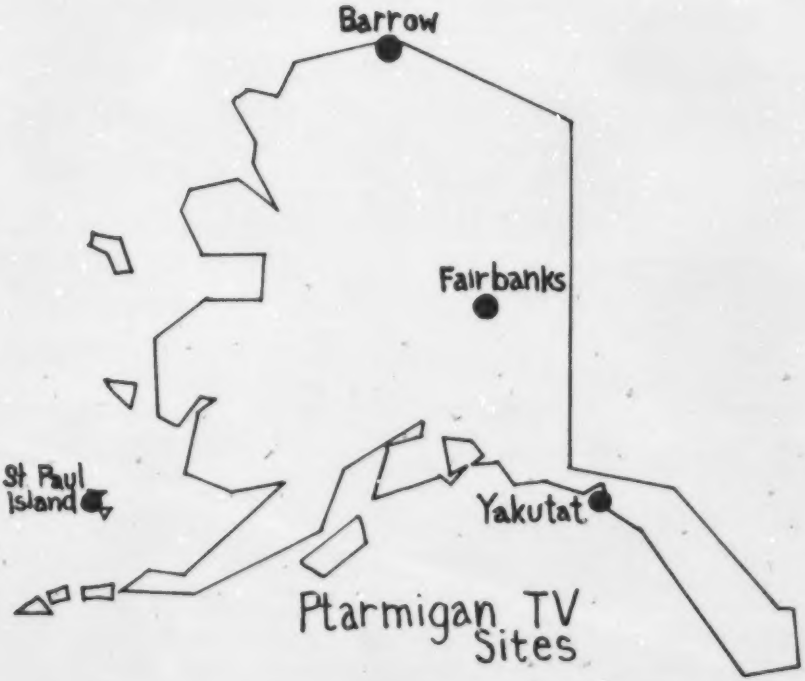
*Still photography can be used for graphics or tied together with music to form its own story within a video tape

*Students can create a time line for their community to organize events chronologically for use in a video tape

*Interviews can be made with audio recorders; the sound can then be dubbed over the video picture

*Field trips can be arranged to TV and radio stations (be sure the station personnel know your students' level of experience so they can plan accordingly).

The potential uses for video in both urban and rural school districts have been limited in part by insufficient prior training and funding. Ideally, some of the suggestions contained in this guide will provide an incentive and adequate guidelines to promote more extensive use of teaching and learning with video.


Barrow
Fairbanks
St Paul Island
Yakutat
Ptarmigan TV Sites

SECTION II:

WHAT WE LEARNED FROM *PTARMIGAN TV*

Introduction

Ptarmigan TV was funded by the National Endowment for the Humanities under the Elementary and Secondary Education General Projects Category. The grant proposal, written by Ron Inouye of the Center for Cross-Cultural Studies (CXCS) of the University of Alaska at Fairbanks, was a plan for students to produce video curricula based on community history.

Through this project, students developed complementary academic and video skills. The academic skills of writing and research were joined with the planning and production techniques of video, providing distinctive opportunities for students to learn about the people and immediate environment of their local communities in a structured and organized manner.

The four participating schools were:

Barrow High School
North Slope Borough School District
Dr. Don Renfroe, Superintendent
Mr. Alan Sevener, Cooperating Teacher

St. Paul Island High School
Pribilof Islands School District
Mr. Lewis Weaver, Superintendent
Ms. Alice Taff, Cooperating Teacher

Tanana Junior High School
Fairbanks North Star Borough School District
Dr. Bryce Stallard, Superintendent
Ms. Marlys Henderson, Cooperating Teacher

Yakutat High School
Yakutat City School District
Mr. Fred Kent, Superintendent
Ms. Elizabeth Boario, Cooperating Teacher

Through teacher interviews and questionnaires distributed during the course of the project (October 1978 - June 1979), the need for a teachers' guide to video became increasingly apparent to the *Ptarmigan TV* staff. Most schools throughout the state have basic video equipment, but this equipment is seldom used. Most schools, we learned, have no curricula for video or TV, no technical instruction for teachers, no repair or tape duplication facilities, and equally inadequate equipment maintenance schedules. Additionally, teacher training programs in Alaska have not included video; thus, school administrators are reluctant to allow teachers and students to experiment with the existing video equipment, and teachers

lack information for building a case to incorporate video in the curriculum. Hopefully, the *Ptarmigan TV* project served as a catalyst for encouraging the use of video in schools and in the development of video curricula.

Robert Walker, an individual with extensive experience in video production and instruction, was the project's media specialist; Carol MacTaggart, a certified teacher with experience in the New York City and St. Louis schools, served as curriculum specialist; Katy Lacher assisted the project staff and site teachers as project secretary; and Ron Inouye, an education specialist with the Center for Cross-Cultural Studies, was the project director.

During the project year Carol and Bob visited each of the project sites twice to lend technical assistance. Bob assisted the students and teachers to become more adept at using their existing video equipment and provided workshops on preventive maintenance and editing.

Carol assisted the teachers and students in identifying local sources of information from which scripts could be developed. She also accessed, and provided to the sites, materials in the form of photocopies, photographs, and statistics from collections at the State Library in Juneau and the University of Alaska, Fairbanks (UAF) library and archives. She also edited a monthly newsletter of information contributed by students from each of the sites.

Two special consultants who assisted during the project year were Daniel and Theresa Mack. Both have public school and university teaching backgrounds and are on the staffs of the New School for Social Research and the Communications Department of Fordham University in New York City. They also have broad experience with media productions.

Each school site was provided $500 to use as a discretionary fund to accomplish the production of the video tapes. Use of these funds included:

*sending students to Fairbanks to learn how to edit tapes
*sending students to the Anchorage evaluation workshop, thereby allowing students to meet each other and to comment on the project
*chartering planes from which footage was shot for use in a tape
*payment for local costs of arranging transportation and snacks for students on shooting schedules away from schools
*purchasing small pieces of needed equipment such as hand-held microphones, tape splicers, etc., and
*duplicating costs of archival photographs.

Although the students' and teachers' prior video experience varied, the most important factor in developing a

satisfactory program seemed to be the enthusiasm and dedication of the teachers. Willingness to spend extra time in solving equipment quirks and transcending bureaucratic hurdles was essential in order to keep production going. In one exceptional case, Alice Taff at St. Paul had to consolidate what was left of her equipment after a destructive Christmas school fire. By borrowing a deck and cleaning equipment from the community TV station, she and her students were able to patch together a video system for continued tape production. Case studies of the project follow.

Barrow: A Case Study

Barrow High School's cooperating *Ptarmigan TV* teacher was Alan Sevener. Al had previous video training, and also had taught photography. His cooperating class in Barrow was a television production class which started in mid-January. Twelve students, grades 9-12, attended class one hour per school day.

The Barrow class was very teacher-directed, with the chief instructional objective being to teach technical production skills. Barrow schools had previously recorded basketball games and school board meetings. These activities provided some students with video taping experience prior to *Ptarmigan TV*. Others in the class learned by experimentation with the equipment available to them.

Equipment:

3 porta-paks, 1 black-and-white and 2 color
2 studio VTRs
2 monitors
1 microphone
1 set of lights

Schedule:

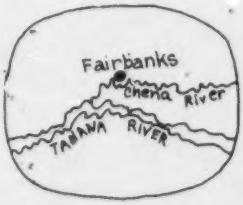
December
*_Ptarmigan TV_ begins

January
*Barrow TV class begins in mid-January
*teacher introduces equipment to students
*students "play" with the equipment, practice camera shots, recording
*students produce introductory tape
*students (on rotating basis) tape footage of Arctic Winter Games

*students edit footage of games and add sound track
*students work with editing equipment in Fairbanks

March through April
*2 students travel to Fairbanks to use editing equipment
*students shoot footage of Around Barrow, edit the materials and add narration
*students tape hallways of Barrow school and experiment with animation
*one student, working with curriculum specialist, makes historical tape of Barrow using archival photos from the North Slope Borough. Pictures are categorized, recorded in log form, and shot in order. Music is added later.

Community resources used:
North Slope Borough Planning Department (historic photographs)
Local TV station (Arctic Slope Regional Corporation)



Fairbanks: A Case Study

At Tanana Junior High School in Fairbanks the participating teacher was Marlys Henderson. Her Gifted and Talented resource room had 28 students participating in a voluntary, individualized program. The amount of time students spent in the resource room varied from one to fifteen hours a week, and Marlys found that students spent more time in the resource room when *Ptarmigan TV* was introduced. She had no previous video experience.

Marlys' approach in the Gifted and Talented program was one of individualized and group study with teacher guidance. Her objectives for *Ptarmigan TV* were to give her students a respect for other ways of life and a sense of community. Many Fairbanks residents are highly transient, and this second objective was to help develop a sense of belonging in her students. Students chose topics for the tapes, then signed up crews to fill the roles of producer, director, camera person, etc. Field trips, initiated by the teacher for enrichment and research, often involved after-school time and transportation.

Students at Tanana also worked very closely with Bob and Carol as the proximity of the school to the University allowed for frequent visitations and consultations.

Equipment:

1 portable black-and-white camera	2 black-and-white porta-paks
1 studio VTR	1 microphone

Schedule:

December

*_Ptarmigan TV_ begins

*students and teacher in small groups are introduced to the equipment, preventive maintenance, and actual shooting. Video terms introduced

January through February

*students "play" with the equipment, discovering how to make a person "disappear" with the use of the pause button

*interviewing practice

*students produce an introductory tape (students introduce themselves quite creatively)

*students decide topics for tapes and sign up for positions (director, camera, etc.)

*student groups start research for tapes. Trip to University archives for history tape using photos, microfilm, Alaska collection. Students prepare schedule for "School Life" tape

March through May

*students produce "North Star Borough," "Family," and "Personal Life" tapes by shooting footage, editing, scripting, and adding narration. "History" tape matches still photos to scripted audio

*students learn interviewing skills with assistance of local TV personalities and project consultant, Dan Mack. Students tape interviews with Senator Ted Stevens and Pioneer Home senior citizens on location and in the studio

*tapes produced almost simultaneously, resulting in few finished tapes until the end of the project (compared to other sites' scheme of producing one tape at a time)

*students develop Fairbanks time line. Photo stories about Fairbanks area, field trips to commercial and PBS TV stations are made, and written reports are made

*students learn to edit at a local non-school editing facility under direction of Bob Walker

*students appear on local TV talk show to explain

project and show tapes. Tapes are also shown at PTA meetings

Ptarmigan TV staff and two students provide an in-service for high school English teachers. Students successfully demonstrate equipment and discuss project

*students conduct video training sessions for elementary and other junior high school students.

Community resources used:

- Local TV stations
- University of Alaska Library (microfilm) and Archives
- Pioneers' Home
- PTV consultants
- Local artists
- U.S. Senator
- Borough officials and facilities
- Local video editing facilities
- School and Borough libraries

St. Paul Island: A Case Study

Alice Taff, the *Ptarmigan TV* teacher at St. Paul Island school, had had college work in video. Her ninth-grade social studies class had been making video tapes three months prior to becoming part of the *Ptarmigan TV* project. Approximately 12 students worked for one hour each day, supplemented by many field trips to shoot scenes on the beach, at the airport, at the seal rookery, etc.

Alice's objectives for the project were to teach students to organize the video work themselves and to explore the St. Paul community as subject matter for the video tape exchange.

As the year progressed, students were able to assume jobs, such as director, etc. and follow the steps in making a video tape with less and less teacher guidance. Keeping equipment in order, maintaining and cleaning equipment, and logging tapes were other jobs that students were able to perform without teacher direction.

Leaving school and going into the community in the school van for "shoots" seemed to be a major motivation not only for Alice's students, but also for students in the other sites. An airplane ride to nearby St. George Island was an exciting trip. Alice and three students made a tape to show on St. George Island TV to introduce themselves and explain why they had come to St. George with cameras. Initially, Alice and the students had assumed that since St. George was such a small community, and so close to St. Paul, the people

would know by word-of-mouth why they were there. However, when it became apparent that some explanation was needed, the tape to show on St. George's mini-watt TV resulted. During taping, the production crew requested assistance with transportation and the cooperation of the residents. One specific request was that the St. George residents "act natural." Unfortunately, after some taping, the video equipment failed; but aerial footage of St. George and the initial construction of an Aleut boat were taped before the equipment failure.

Community interest in video in St. Paul is very high; tapes have been shown on local mini-watt TV. This summer the students will be shooting sealing and wildlife tapes under the supervision of Timon Lestenkof.

Equipment:

- 1 color camera
- 1 black-and-white camera
- 2 monitors
- 2 studio VTRs
- 1 portable VTR
- 1 microphone
- 1 light kit

Schedule:

September through November

- *students read about video equipment
- *students work with equipment and learn the mechanics involved
- *each student makes practice shots and works with every aspect of the equipment
- *students analyze broadcast TV programs for contrasts in editing, camera angles, continuity, framing, lighting, and audio
- *students participate in video exercises: shoot mock commercials, shoot footage of St. Paul area for St. Paul area high school students attending high school in the Matanuska-Susitna borough schools, imitate shots from commercial TV programs

December

- **Ptarmigan TV* begins
- *students shoot introductory tape
- *students video tape Christmas celebration in community and school
- *St. Paul Island school burns, with some loss of equipment and tapes

January through May

- *using black-and-white equipment, students experiment with animation, producing "Birds of Heaven." A commercial, "Disco Ad," and a tape of the school, before and after the Christmas fire, are completed
- *teacher and students have editing experience in Fairbanks

*students develop tapes on the topics of City Hall, beachcombing, church and community history. In these tapes the color camera and lights are used. Archival photos are incorporated into the history tape. Using community resources that range from oral history to artifacts found in the community, students continue their historical research
*students self-assign responsibilities for taping
*teacher and students make trip to St. George
*tapes shown on community mini-watt TV at scheduled times; community reaction is favorable.

Community resources used:

Written reference books from village corporation
Artifacts from the City of St. Paul
Mini-watt TV station
Fisheries
Local citizens
Father M. Lestenkof (interviews, photos)

Yakutat: A Case Study

Liz Boario was the cooperating Yakutat High School teacher. In September, Liz began a TV production class which became part of the *Ptarmigan TV* project in December. As an ongoing activity, Liz's students (grades 9-12) produce video tapes for and manage the community's mini-watt TV station, KO2ID, for which the school holds the license.

Prior to *Ptarmigan TV*, the video production class made and broadcast tapes covering community events, including a bi-weekly news program. The students are paid for their work at the station after school hours with funds from a vocational education grant. All of Liz's experience came from working with station KO2ID; in other words, she was self-taught. Her class, comprising 12 students, met for one hour each afternoon, with extra time devoted to field trips for shooting.

Liz's objectives for the class were: (1) teaching the use of all video equipment in the studio including the broadcasting hardware, (2) production of news, interviews, and community activities for local broadcast (this activity was later dropped because of time constraints), and (3) researching local history and geography for exchange with the other *Ptarmigan TV* sites.

The students in the video production class will continue to work with the TV station next year. This summer, the *Ptarmigan TV* tapes from all the sites will be shown as a

series on station KO2ID.

Equipment:

- 3 studio VTRs
- 1 studio black-and-white camera
- 1 portable black-and-white camera
- 1 video switcher
- 1 light kit
- 1 RCA mini-watt TV transmitter

Schedule:

September through November
- *"Beginning and Advanced Media," a class in video production, begins
- *students produce video tapes on community events and news

December
- **Ptarmigan TV* begins
- *students set goals for project and decide topics for tape exchange

January through February
- *students make introductory tape
- *students edit previously shot tape with new tape to produce "Activities in Yakutat"
- *students script, then shoot, "Winter in Yakutat," a tour of the community

March through May
- *students research material on local glaciers
- *students make maps for tape entitled "Ptarmigan in Flight"
- *glaciologist visits Yakutat school
- *using a chartered plane, students shoot aerial footage of glacier
- *footage is edited and scripted using the earlier research

Summer
- **Ptarmigan TV* tapes will be broadcast to the community.

Community resources used:

- School library
- Local citizens (oral histories)
- Visiting scientists
- Local pilot
- Station KO2ID (broadcast and production)
- Local electronics technicians (repairs)
- Music teacher (wrote original music for tape which was played by student flutist)

Cooperating Teacher Comments

The four cooperating teachers shared some common insights upon completion of the *Ptarmigan TV* project. All agreed that patience precluded other essential factors; however, each teacher had some specific advice for colleagues. Selected quotes follow.

"Pick your students carefully . . . try to get assigned to a room where you have control and few distractions.

"I would warn you that it's not going to be extremely easy to get . . . enthusiasm. You may luck out and get a group (of students) who are crazy about doing it.

"There are times when it's totally boring. You do really have to work with your equipment because not everything is going to go smoothly.

"I think teachers are going to have to have a lot of patience because if kids get involved with video, they're going to be playing with machines and cameras, and just doing their own thing with the equipment.

"If the teacher has an expectation . . . to see a perfect, finished product, it's just not going to happen. Don't set your sights too, too high.

"Look at the kids . . . you have to see what their attention spans are. Maybe you have a five-minute attention span in your class; work within that five minutes, and with the rest of the time you're going to have to do something else.

"Monday is the best day for lecture; Tuesday through Friday, use the equipment.

"The younger the students, the more carefully you select students.

"A two-hour lab is better than a one-hour class.

"The shooting crew should be kept as small as possible. Splitting up the class for field trips can be a problem.

"Planning and gaining the trust of school administrators is essential.

"Don't think you can do everything you think you can do. On the other hand, I probably wouldn't keep you from trying.

"Don't be afraid to let students handle the equipment. I would say, use extreme caution at the beginning or at least act as if you're cautious. Overdo it a little so the kids get the idea that this equipment is delicate.

"Advertise the project as much as possible so that the people in your community will understand what is going on and know what to expect from the work you're doing with them. If you have a mini-watt TV system, get the tapes on the air in fairly viewable form as soon as you can so that people can think their contribution is being used. I know people who wonder, 'Now, what did they do with that tape they made of me?'

"This has been one of the most creative projects I've been involved with as a teacher. (Using video) is very demanding but very rewarding in terms of student behavior; students changed from passive participants to active learners.

"Be prepared for lots of work and active teacher involvement.

"Don't be afraid of the equipment. It's usually very reliable. It's not unusual to have it used in the first or second grade.

Teacher comments also indicated that reticent students who were not members of any identifiable group in classes became more outgoing as the project progressed. Being placed into production teams caused shy students to socially interact.

Other quiet students with special skills previously unrecognized by their peers had opportunities to demonstrate those skills and become peer instructors. The student musicians, artists, writers, mechanically inclined tinkerers, and others had their skills recognized by classmates and reinforced in the project. One shy artist became the star of his class when his design was chosen to be the project logo; by the end of the project he was outgoing and an active participant in other class activities. Similar behavior changes occurred with other students.

Project Staff Comments

The taping we accomplished during the *Ptarmigan TV* project was done in four sites across the state. In retrospect, we would recommend that exchanges be limited to pairs of schools, ensuring that the students involved will have opportunity for frequent contact via tape. The time-consuming logistics of meshing multiple shooting schedules, irregular

mail service, and highly variable individual students and school calendars add delays to the exchange process. Students need the immediate reactions of their exchange-school viewers. Time delays erode the enthusiasm students have about the content of each tape.

Set aside classroom time for the group viewing of exchanged tapes. Help the students develop a system for looking at and discussing the tapes. Not only questions related to the technical aspects may be raised, but also questions about the ethics of film making, such as using footage which shows individuals in awkward situations, juxtaposing obviously contradictory points of view to accentuate differences, etc. Students need to be exposed to the philosophical and ethical issues which confront all media professionals.

By having the students view each other's tapes and critiquing those materials on a regular basis, students will learn that their work doesn't always have to be the center of attention, and that other people may have different points of view on issues. Systematic viewing of the tapes also helps students develop an idea of objectivity in the analysis process. It would be interesting to know if student video analysis skills transfer to the manner in which those students view and react to commercial television.

The way in which you organize work teams to produce the tapes may help you develop social skills among the shy or reticent members of your class. Students have blossomed in video classes because they were paired with peers and they could teach one another. The team concept also allows students to get to know one another, and allows you to mix students who might otherwise congregate in more traditional groups. The process of viewing themselves on the monitor, in private or before the class, helps some students develop self-confidence.

Remember to keep your master tapes and mail only duplicates for exchanging. Many times the masters disappear in the hands of trusted viewers. Trust no one with the master tapes.

Our project convened two workshops for the cooperating teachers and project staff. Those meetings were invaluable for the interchange of information and the opportunity to discuss future programming. They were tremendous morale boosters for all concerned. In your plans for a video project, do plan to meet with your counterparts during the school year.

Prior to the beginning of actual taping, check with colleagues in the building or school district who may have video experience. Often, the teacher in the next room has valuable experience and advice to share, and could save you some frustrating hours.

Use common sense in areas dealing with legal issues, particularly with the use of release forms, airing of materials on cable or mini-watt TV, etc. Do learn who is the

district legal counsel so that you can tap him or her for advice. This will help you avoid any potential problems.

When you reach the point of considering the purchase of new equipment, perhaps a new color camera or mixer, have the students research the possibilities with you. They can learn much about video merchandising, the state of existing equipment, and negotiation of prices. Because they are the ones who work with the equipment, they have a good understanding of equipment needs. Students can help in appealing to the building principal, superintendent, or school board for equipment. The students at St. Paul used video for their presentation to the school board.

As students gain sophistication and dexterity with the equipment, help them learn about the uses of tape for documentary purposes. Law firms, legislative committees, agencies developing environmental impact statements, and local government groups taking public testimony, etc., use video tape to an increasing degree in the courses of their everyday business. This exposure to the applications of video may help some students identify potential career opportunities.

Through the project, we learned that many students do not, in fact, know how to write or communicate well in a written mode. The project teachers would often need to obtain oral rather than written responses to questions as the students lacked the ability to write clearly or to organize their thoughts on paper.

It would be advisable to incorporate varying levels of written work into the video tasks, such as requiring complete sentence descriptions on time lines rather than simple word entries (i.e., "Fairbanks' first building was erected by Captain Barnette in 1901" rather than, "1901--Fairbanks' first building--Barnette"). Many other video tasks can integrate opportunites for students to practice writing skills.

Examples of the students' work at each of the four sites are available on four separate video tapes. A 29-minute tape entitled *Ptarmigan TV: A Network of Young Minds* provides an overview of the entire video exchange project. Copies of these tapes are available for use through the regional resource centers and the Alaska State Film Library.

The results of the *Ptarmigan TV* project have indicated that it is possible for teachers in varied classrooms to incorporate video into their daily instruction. The nature of the medium requires many students to gain technical knowledge of the equipment, an enticement for many, and a knowledge of the subject matter as well. The requisite planning, scripting, research, etc. for video tape production teaches and reinforces basic planning and academic skills.

There have been significant areas which are in need of further study, areas which may be researched by teachers currently interested in initiating a video project. Among recommended topics which would be of interest are the following:

How best can video be used in examining the future career options for students?

Can video be used to lessen the physical and informational isolation of students in both rural and urban schools?

Do student-produced tapes aired regularly on local mini-watt, cable, PBS, or commercial television affect the public attitudes towards the schools?

Can schools work together with local historical agencies and community libraries to actively and systematically develop a reference bank of video interviews, building inventories, events, and the like for use in the same manner that we currently use books and photo collections?

Do students working in video programs have a better background with which to understand the issues related to local, state and national telecommunications policies?

We urge you to take the challenge of incorporating video into your classroom. You have the resources of your own unique community, and your school can probably provide the necessary video equipment. Combine the two and perhaps you, too, will provide those magic moments of insight and learning with video for your students, for your community, and for yourself.

Student Evaluation

At the conclusion of the *Ptarmigan TV* project, selected students were interviewed for their responses to a questionnaire on the video experience. The majority of student participants valued the experience and would continue in a similar class were it offered again. The students' primary reasons for appreciating the class were that they learned how to use the video equipment and were able to participate in the variety of experiences the video class offered, such as field trips and visits to shooting locations. The students' dislikes, particularly, were the repetitive tasks such as logging tapes and the consistently underestimated length of time necessary to complete a video tape.

When asked what one thing in the project they would change, the predominant responses were equipment-related. The students wished for a greater variety of equipment and equipment of better quality. However, there were overwhelmingly positive responses to the use of even limited varieties of video for communication purposes as opposed to the use of written communication. Students felt that video tape is easier and more effective.

The students enjoyed viewing the tapes from the other

sites, but reactions to specific items on the tapes varied. The community histories and tapes of the physical environments were of significant interest. Besides the video tapes, the students commented on the effectiveness of the monthly newsletter and the use of locally available reference books to help them learn about the other sites.

The students also indicated that they learned more about their own home communities than they did about the other communities in the project. In the research necessary for script development of their own history tapes, they learned much about the human and physical phenomena of their own areas. To aid in that research, students used local libraries, interviews with people in the community, and visits to local agencies which had relevant information such as City offices, Fish and Game, local corporation offices, and the like. The production of the local history video tape and the creation of a local time line seem to have provided major focal points for the studies.

Students all responded affirmatively when asked if they were now more aware of the technical aspects of commercial television and movies. They seemed to be more critical about what they viewed, the types of shots used, etc. Television commercials and locally produced television news programs were the two types of programs about which the students were most critical. When asked, "Would you like to have TV production as a career?" the students were generally negative. Most indicated a better understanding of the medium; however, few were interested in pursuing it as a career.

The students suggested that a more direct tape exchange among the sites would help them learn more about each other personally. Direct questioning on tapes with subsequent response tapes, a pen-pal relationship to supplement the video tapes, and ultimately a student travel exchange were ideas on how to enhance the video exchange.

HOW THE VIDEO EQUIPMENT WORKS

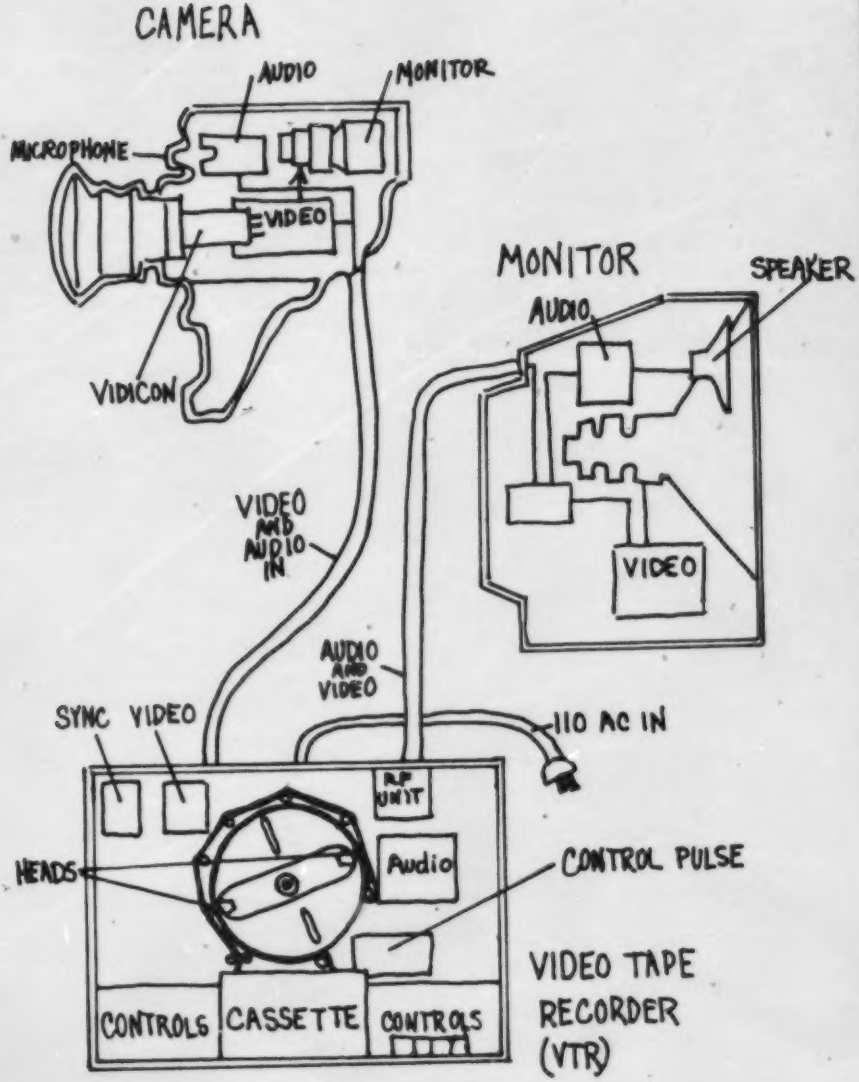
Introduction

The enjoyment you attain, the quality of education your students attain, and the quality of your combined efforts are directly related to your understanding of video. This section provides sufficient information to assist you through your own video project or class. We also encourage you to read as much as you can from other sources, and to work (and play) with the equipment until you and your students feel completely at ease with it.

The fundamental element of your project is the equipment. In this case, a little knowledge is a powerful thing. The more you know about your equipment, the better your product will be. You'll be surprised at how innovative you and your students can be in overcoming technical problems. The first bit of advice is to make the operations manual of all of the equipment mandatory reading for your students. Also, because the key to successful operation and repair of all of your equipment is information, it is essential that you order the repair manual from the dealer. It's better to spend 45 minutes reading the repair manual than it is to waste two weeks' time and a considerable amount of money shipping the equipment off to Anchorage or Seattle whenever a problem occurs. The repair manual also will inform you as to the possibility of making your own repairs or having to send the equipment off to an "expert." Additionally, the manual provides a list of the tools and equipment necessary for each repair operation and a step-by-step procedure for you to follow.

You'll need access to someone who can help you when you have technical problems. Search your community for any- and everyone who knows a little electronics but, more importantly, who is mechanically minded. Ninety-five percent of the problems you will encounter are mechanical in nature, not electronic. The integrated circuits of modern video equipment are remarkably reliable and should give you few problems. Don't deceive yourself, though; things will go wrong. You can't get halfway through the course and then quit because of equipment failure. Try to locate someone through your regional resource center, or try to establish a workable relationship with an electrician or engineer at an RCA station, a Naval base, or a local mechanics shop. Of course, the ideal solution is for you and your students to learn enough to see your class through those dark days of equipment failure.

Treat your equipment gently and with respect and teach your students to do the same. Don't be afraid of the equipment. Feel free to play around and experiment, but do take care of it. Limit the equipment's use to those who have been checked out on it.


CAMERA
AUDIO
MONITOR
MICROPHONE
VIDEO
VIDICON
MONITOR
SPEAKER
AUDIO
VIDEO
VIDEO AND AUDIO IN
AUDIO AND VIDEO
SYNC
VIDEO
110 AC IN
RF UNIT
HEADS
Audio
CONTROL PULSE
CONTROLS
CASSETTE
CONTROLS
VIDEO TAPE RECORDER (VTR)

Equipment

All video equipment consists of three parts: (1) a camera to record the image; (2) a video tape recorder (VTR) to record the electronic image from the camera onto magnetic video tape; and (3) a monitor or modified TV upon which to play back the recorded images.

Video equipment is either stationary, "studio" equipment, or portable, "porta-pak" equipment. Most cameras and VTRs can be used either indoors or outside if batteries or alternative power sources are available. When purchasing equipment specifically for outdoor use, make sure it contains its own power source.

The only disadvantages to portable equipment are its slightly higher purchase price and exclusive use of 20-minute video cassettes.

Camera. The piece of equipment that will receive the roughest handling is the camera. First we'll discuss how it works, and then how to keep it working. A video camera is not the same as a film camera: video is an electronic process, while film is a chemical one. In video, light reflected from a subject is focused by the camera lens onto the face of the vidicon tube directly behind the lens. This image is then scanned by the vidicon tube and converted to an electronic signal. The signal is sent out of the camera along the coaxial cable, labeled, not too surprisingly, "video out." Before it leaves the camera, the signal is duplicated and sent to the viewfinder so the operator can see what the picture looks like. But keep in mind that the controls for the viewfinder in no way affect the signal that is sent from the camera to the monitor or VTR.

If the lens of the camera is kept clean and free of scratches and fingerprints, it should give you no trouble. Don't clean the lens with a shirt tail. Camera lenses have a protective chemical coating that is damaged by anything more abrasive than lens paper and lens cleaning solution. Keep the lens cap on at all times when the camera is not being used.

The major danger to the vidicon tube is that too strong a light will fall on the face of it and create a dark brown or black spot on it. This is called a "burn." For this reason, the camera should never be pointed at any bright or intense lights, such as the sun or a flashbulb. If a camera develops a minor burn it may be corrected by turning the camera on and pointing it at an evenly lit blank card. It's also possible for dust to settle on the face of the tube, but that is a simple problem to remedy. Just remove the lens and the protective glass cover and then clean the tube with a lens cleaner and cotton swab.

If you have a color camera, to ensure color continuity be sure to "white balance" the camera according to the

instructions in the manual every time you turn the camera on. Unless you are operating a system with more than one camera and a sync generator, keep the camera on "interior sync" at all times.

Protect your camera from the weather as much as possible, which may be a difficult task here in Alaska. Take along a plastic cover if there's any chance of rain or rough seas. If you're shooting in extreme cold, you'll need to construct a "barney" out of quilted material to insulate the camera. It's also a good idea to design it with a pocket on the inside for a hand-warmer which will allow the camera to stay warm and keep the camera person's hands from freezing. Be sure to watch your video cables also; a CBS news team had their plastic cables shatter in 1978 while shooting on the Arctic Slope. When you bring the camera inside again, the vidicon tube will fog up and be unusable for about 20 minutes. It shouldn't cause any permanent damage. If you have a fluid-head tripod, don't count on it being fluid at 40 degrees below zero Fahrenheit.

Video Tape Recorder (VTR). The video tape recorder is your most complex piece of equipment, and also the most fallible. Its purpose is to take the incoming electronic signal from the camera, and after processing it through two filters and an amplifier, translate it into electronic pulses which the video heads lay down on the tape for storage. These video heads are housed in the round drum around which the tape runs. There are two heads, one on each end of an arm which spins around inside the drum. The reason for this hubbub of activity is that to produce a quality video signal, the tape must move at 7-and-one-half inches per second in one direction while the heads rotate the opposite direction at 1,800 r.p.m., with the result that each video head contacts the tape and moves across it 30 times per second. Once the tape has received the signal through the heads, it can be stored for an indefinite period, until the process is reversed and the tape is played back. The magnetic patterns on the tape are read by the heads and the electromagnetic signal re-converted to an electronic one. Then this electronic signal passes through a few more amplifiers and filters, finally reaching the "video out" plug on the VTR.

There is a second way this signal can pass from the VTR to the monitor. If your recorder is equipped with a radio frequency (RF) unit, the signal can be transferred from the "RF out" plug to the antenna leads on the monitor. These RF adaptors cost about $105 for color and $60 for black-and-white.

One-half-inch reel-to-reel machines contain diagrams on how to correctly thread and operate them. You should follow these directions carefully and make sure each of your students is confident that he or she can load and run the machine properly. Video helical scan (VHS) and three-quarter-

inch cassette machines are easier to load, but we pay for this ease of operation with a machine that is more complex. Most of the problems you will have with the VTR will be in the mechanics of loading and unloading, and in moving the tape past the heads at the proper speed.

Video Production Crew

After making sure that everyone has read the instruction manuals, give the students a short introduction to the equipment. As soon as they are ready, let them teach one another how to use the equipment. Peer teaching allows you additional teaching time and should ensure that the students really know what they're talking about. Talk about the different responsibilities of each member of a working production crew.

1) The director has the first and final responsibility for the production. He or she should make sure everyone else on the crew understands what is expected, arrange for the equipment and the crew to be in the right place at the right time, and make all the production decisions, such as camera placement and angle, what's taped first, and the like.

2) The technical director is responsible for making sure all of the equipment is working before the shooting begins, that the batteries are recharged, that the video heads are clean, etc. He or she operates the recorder during the shoot and, most importantly, keeps track of all the equipment.

3) The camera person has the well-defined job of giving the director the camera shots and movements requested. The camera person is also responsible for taking care of the camera, color balancing it and making sure that the lens is clean, etc.

4) The audio person takes care of the microphone, decides on the best place to locate it during a shoot, and monitors the sound throughout the video recording.

5) The grip or crew are the remaining members who help by carrying equipment and doing all of the disagreeable tasks necessary for the production.

All the positions are subordinate to the director; everyone should experience the responsibility of being the director at least once. Make sure everyone has a chance to try all the positions.

Troubleshooting

Again, being gentle with your cassettes and your recorder will solve many of your problems. Unfortunately, there are other things that can go wrong.

1) No power in the VTR--check to make sure you have power from the electric outlet. Then check the fuse in the back.

2) No signal reaching the monitor--make sure all your cables have solid connections, and that there are no loose wires in the plugs at either end.

3) Very poor or unstable picture--if you are certain that the picture was originally recorded in good condition, clean the control track head with freon or "video head cleaner."

4) Noise in the picture and frequent break-up--adjust the tracking knob.

5) Picture bends over at the top--adjust the skew control.

6) Garbled audio--clean the audio head (this is relatively rare).

7) You get a signal, but it's just noise. First, be certain that something is recorded on that portion of the tape. Then clean the video heads. This is done by soaking a clean swab in either head cleaning fluid or freon, then rolling it gently and horizontally across both heads. Be sure that you don't brush up and down, as the heads break off rather easily. Reload the tape and let it play a minute or two, then push "pause" for a few seconds, then release. Repeat this process until the picture is restored.

8) Tape starts to wrinkle (this usually happens only with cassettes)--stop machine immediately. This is caused when the tension on the tape created by the supply reel is too great. Check to see if the post which moves the supply reel is binding and needs lubrication. (Note--follow the instruction manual carefully when lubricating. Too much oil is worse than too little.)

9) Cassette tape stops suddenly--if it's not just the end of the reel, the problem is caused by either the tape becoming snarled in the cassette, or there is a scratch on the tape. If the oxide is scraped off the tape, the light which is located just in front of the loading cartridge can shine through to the photo cell on the opposite side of the tape and this signals the tape to stop. This is the system which automatically instructs the machine to stop at the beginning and end of every tape.

10) Cassette tape loads, but suddenly stops and the loading arm won't return the tape to the cassette. The machine seems frozen, and not even small explosives can move that arm. This seems particularly true of the SONY 3800 portable VTR, but the remedy is very simple. There are "test points" which only need to be contacted to the chassis with a screwdriver and then the arm will return automatically. The repair manual shows where these "test points" are located.

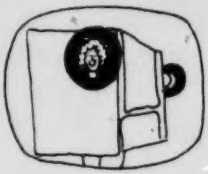
These are the most common problems that people have using video tape equipment. Keep in mind that the more information you have, the easier it will be to hold onto your sanity when things go wrong. There is an annotated bibliography in the back of this manual with suggestions for sources of help with either maintenance or with your productions. Good luck!

APPENDIX A:

ILLUSTRATION OF VIDEO TERMS, STORYBOARDING, RELEASE FORM AND TAPE REVIEW FORM

Video Terms

FRAMING: The action of lining up in the viewfinder the image you want to record. Centering a person's face in the viewfinder (or on the monitor) is an example of framing.

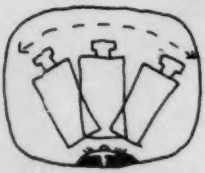


LONG SHOT: The shot used if the subject matter is a great distance away, and includes a great deal of the scene.

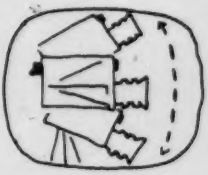
MEDIUM SHOT: A shot between a long shot and a close-up; a view of the head and shoulders of a person, as opposed to a close-up of a face or a long shot of the whole body.

CLOSE-UP: A shot that shows the subject in great detail, at a seemingly short distance from the camera.

PAN: Moving the camera around a central axis, either on a tripod or by hand-holding the camera.



TILT: Movement of the camera up and down.



"WORM'S EYE" VIEW: A shot taken from below, looking up. This makes the subject seem larger.

"BIRD'S EYE" VIEW: A shot taken from above, looking down at the subject.

ZOOM: A visual movement toward or away from the subject, without moving the camera. By pressing a button or turning the ring on a zoom lens, you can move the image "in," from far away to a closer shot, or "out," from a closer shot to one that is longer.

ESTABLISHING SHOT: A long shot that sets the scene for a sequence to come, by letting the viewer know where the action will take place.

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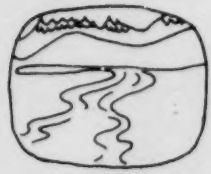
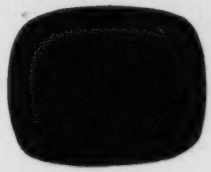
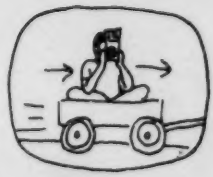
CUT: A sudden change from one shot (such as a long shot of a landscape) to another (a fish). You can make cuts either in the camera during the taping, or later when editing the tape.

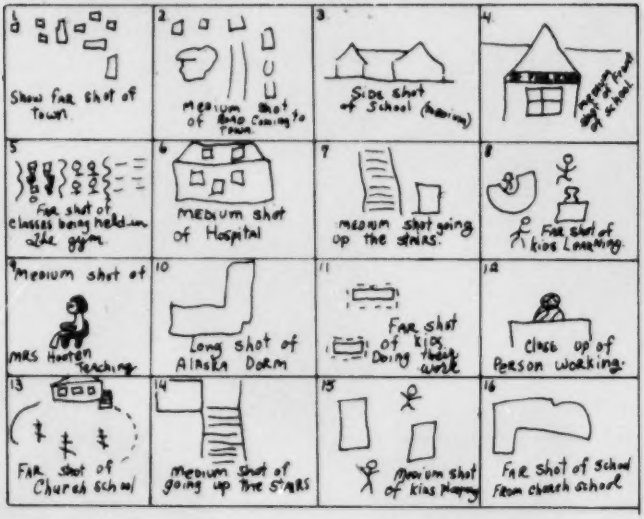


FADE: To vary the light admitted to the lens by turning the f/stops up or down. This creates the effect of gradual darkening or lightening of the picture, and can be used as a transition from one cut to another.



TRACKING OR "DOLLY" SHOT: Moving the camera in relation to the subject, either by walking with it or by using a wheeled device (a wagon, wheelchair, dolly, or car) and gives the shot a smoother look.





Storyboarding is a way of visually organizing a sequence of video production elements. This illustration is from St. Paul School, and is a good example of the sequential visual elements necessary for organizing camera shots. You might also include cues for the audio sequence.

Before working with storyboarding, try a lesson in simple cartooning. Use four boxes to make it especially easy for the first exercises, with geometric shapes and an uncomplicated story line such as a flower growing or the sun coming up. Discussion of sequencing of events and points of view could easily lead into laying out a video story.

Storyboarding a video tape sequence should include the use of various camera shots. The storyboard should be a guide but when you actually start shooting, remain open to new or unexpected ideas.

Release Form

TO: Ptarmigan TV Project, _____School

FROM: _____

I give my permission to the Ptarmigan TV Project, _____School, and the University of Alaska, Fairbanks, Center for Cross-Cultural Studies, to publish photographs, video tapes, written or verbal information I have given to these organizations. I understand that these will be used only for educational, non-commercial purposes, and I will receive no further compensation.

Signed_____Date_____

Witness_____

This is the release form used by students during the *Ptarmigan TV* project. It is a good practice to use some form of written permission when you are going to publish or broadcast someone's image or words. By having a person sign a release form and keeping it on file, you can release your work to the public with confidence.

One approach used is to ask the interviewee to sign prior to a taping. He or she should be informed about the project in general and how he or she fits into the plan. You may also decide to wait until the tape is played back before you ask someone to sign a release.

Use common sense; above all, make the person feel comfortable.

Tape Review Form

Name:_____ Taped by:_____ Tape Criticism Date:_____ Name of Tape:_____	
STRONG POINTS	WEAK POINTS
VIDEO	
AUDIO	
CONTENT	

This form was used by the St. Paul Island School students in evaluating tapes from their own and other schools. In one case, the completed forms were sent to the Yakutat school after the St. Paul students had viewed "Yakutat in Winter."

As an alternative activity to taping (for instance, when one group of students is out on location), students could be assigned to view tapes and complete this or a similar form.

APPENDIX B:

INSTRUCTIONAL RESOURCES

Video

Lipton, Lenny. Independent Filmmaking. San Francisco: Straight Arrow Books, 1972.
This book deals with film, rather than video, but the production techniques are excellent and easily understandable. Can be transferred to video production.

Marsh, Ken. Independent Video. San Francisco: Straight Arrow Books, 1974.
This book is an excellent treatment of the physics and basic electronics of one-half-inch video tape. Lots of illustrations, but for the more electronically oriented.

Mattingly, Grayson and Welby, Smith. Introducing the Single Camera VTR System. Washington, D.C.: Smith-Mattingly Productions, 1972.
Simple, straightforward, but so basic it's useful for only the early days of shooting.

Robinson, Richard. The Video Primer. New York: Links Books, 1974.
Probably the best book available on small-format video. Clearly and interestingly written, well researched, and with good illustrations.

"Studio See." Contact Patricia Dressler, Director of Information and Publications, South Carolina Educational TV, Columbia, South Carolina. 29250.
Excellent examples of video work designed for pre-teen audiences.

Videofreex. The Spaghetti City Video Manual. New York: Praeger Publishers, Inc., 1973.
An excellent source for very basic maintenance, particularly with one-half-inch equipment. Good for giving students an idea of the proper care and repair of a video system.

Local History and Video-Related

American Association for State and Local History. 1400 Eighth Avenue, South, Nashville, Tennessee, 37203.
Books, reviews, technical leaflets, slide and tape kits, tape lectures on the subject of history.

"Hands On: Newsletter for Cultural Journalism." Foxfire Foundation, Rabun Gap, Georgia, 30568.
Articles of interest to all teachers and students working with the various aspects of cultural journalism and local history.

"The History Teacher." Department of History, California State University at Long Beach, 1250 Bellflower Blvd., Long Beach, California, 90840.
Quarterly publication of the Society for History Education, which publishes articles of three general types: (1) reports on new classroom techniques, programs, curricula, and evaluation, (2) analyses of historic research, and (3) critical review of audio-visual materials, textbooks, and other works suitable for instructional purposes.

"Media and Methods: Exploration in Education." North American Building, 401 N. Broad Street, Philadelphia, Pennsylvania, 19108.
Magazine for teachers involved in all variations of artistic and language arts.

National Archives and Records Center. 8th and Pennsylvania, N.W., Washington, D.C. 20408.
Excellent source of historical documents and genealogical research.

"Teachers and Writers Magazine." 84 5th Avenue, New York, New York, 10011.
Magazine to bring writers and other artists in contact with teachers and students to create relevant curriculum primarily in language arts.

Vick, Ann. Chamai. Alaska State Department of Education, Pouch F, Juneau, Alaska 99801.
A curriculum guide to community and culturally based communications skills development, grades 7-12. This book contains course outlines developed in Kodiak and Bethel and examples of student work. Forms used in classroom management also included.

Wood, Pamela. You and Aunt Arie. IDEAs Publishing Company, Magnolia Star Route, Nederland, Colorado, 80466.
A guide to cultural journalism based on Foxfire. Written for students, this is easy-to-read with lots of illustrations. Takes readers through step-by-step procedure of naming a publication, writing and illustrating it, layout, and distribution.

Worth, Sol, and Adair, John. Through Navaho Eyes. Indiana University Press, 1975.
Researchers strive to understand the basis for a "film language" by teaching and observing Navaho filmmakers. Good background reading for teachers.

Wigginton, Eliot. Foxfire (Numbers 1-5). Garden City, New York, Anchor Press/Doubleday Books.
Collections of student writings and photographs that document the folklore and personalities of Rabun Gap, Georgia.

Wigginton, Eliot. Moments, the Foxfire Experience. IDEAs Publishing Company, Magnolia Star Route, Nederland, Colorado, 80466.
A teacher's guide to the implementation of the Foxfire experience. This book contains a lot of practical advice, suggestions for starting student publications, and useful checklists.

Zavatsky, Bill, and Padgett, Ron, editors. The Whole Word Catalogue. McGraw-Hill Paperbacks, 1977.
A collection of ideas and materials to stimulate creative writing, video, dramatic improvisation and publication.

Alaska

Alaska Multi-Media Education Program, Alaska State Museum, Pouch F, Juneau, Alaska, 99811.
These kits are designed with student participation in mind. Each kit contains games, objects, books, and other media to involve the student in learning about a particular aspect of Alaskan life (Native arts, hunting, ecology, etc.). A complete list is available from the museum or the nearest regional resource center.

Archives and Manuscript Collection, Rasmuson Library, University of Alaska, Fairbanks, Alaska, 99701.
The Archives will supply copies of old photographs in their collection. The best way is for the student or teacher to select his own photos for reproduction, but if not possible, they will answer telephone calls or letters with photocopies of a number of photos in any given subject area, for 10¢ a print. Choose the photos desired, and they will print them at prices ranging from $4.00 to $10.00.

Instructional Television Project (ITV), State Department of Education, Pouch F, Juneau, Alaska 99811.
This project provides teachers' guides to some of the "Alaska Review" programs. ITV also makes available 3/4-inch cassette tapes on Alaskan subject matter. These are available from the State Library.

Museum Traveling Photo Exhibits, University of Alaska Museum, Fairbanks, Alaska, 99701.
Collections of old photographs are available depicting aspects of Alaskan life and Native crafts. Teachers pay only the postage. Write for complete listing.

Ricks, Melvin. Alaska Bibliography. Binford and Mort, 1977.
This is a bibliography covering much of the material written about Alaska. Available at the University of Alaska, Fairbanks, Rasmuson Library.

Selkregg, Lidia L. Alaska Regional Profiles. University of Alaska, Arctic Information and Data Center.
A set of five atlases covering five sections of the State of Alaska. This set of publications can be found in most school libraries.

Tourville, Elsie A. Alaska, A Bibliography. G.K. Hall and Company, 1974.
This listing is available at the University of Alaska, Fairbanks, Rasmuson Library. Good list of materials on Alaska.

APPENDIX C:

SOURCES OF FUNDING

To acquire funding assistance for your video and other projects, gain the assistance of the school principal and superintendent. They may have access to local funds or know expediencies of application for such funds; the teacher's search may not need to proceed further.

Often, local service organizations and historical associations will provide funding assistance or in-kind services. Some organizations may have purposes which are compatible with the proposed project and would therefore be eager to lend help.

Remember to check all of the local sources of possible funding first, as they don't usually require the elaborate proposal and subsequent reporting and monitoring obligations that non-local sources do.

Two funding sources which may be useful for the classroom teacher are listed below.

Youth Grants in the Humanities, National Endowment for the Humanities, Washington, D.C. 20506
A program offering students of all ages, both individually and in groups, opportunities to obtain funding for projects focusing on the humanities. Examples of previously funded projects include:
- *An oral history of Alabama craftsmen discussing surviving folk crafts*
- *A bilingual text in Spanish and English and a slide/tape presentation on the legends and folklore of the Spanish and Mexican-American people of El Valle, New Mexico*
- *A survey of journals kept by pioneer women on overland trails west to Oregon and California (1840-1860)*

Write to the Endowment for more information about this and other programs.

Artists in Schools Program, Alaska State Council on the Arts, 619 Warehouse Avenue, Suite 220, Anchorage, Alaska, 99501
Local or visiting artists can come to schools to provide student instruction, teacher in-services, and community workshops within many areas of art, including video. Local schools provide space for the artist, matching funds and local coordination for the program. Residencies are available for grades K-12 and range in length from 2 to 16 weeks.
Write to the Alaska State Council on the Arts for information about the Artists in Schools Program and their other offerings.

APPENDIX D:

DEPOSITORIES FOR *PTARMIGAN TV* MATERIALS

During the course of the project year, a number of video tapes were produced. Each site combined the best footage into a 30- to 60-minute composite video "magazine." The project personnel then created a 29-minute overview video tape for the general public discussing the *Ptarmigan TV* project; this overview tape can be locally broadcast on cable or mini-watt TV.

These five video tapes and a copy of the "Teachers' Guide to Video" form a set of *Ptarmigan TV* materials which are on deposit with the following agencies for retrieval upon request.

Alaska State Film Library
Department of Education
Division of Libraries and Museums
Pouch F
Juneau, Alaska 99811

Bristol Bay Regional Resource Center
P.O. Box 10234
Dillingham, Alaska 99576

Media Services Center
3211 Providence Drive
University of Alaska
Anchorage, Alaska 99502

Media Services Center
106 Eielson Building
University of Alaska
Fairbanks, Alaska 99701

Southcentral Regional Resource Center
650 International Airport Road
Anchorage, Alaska 99502

Southeast Regional Resource Center
127 South Franklin Street
Juneau, Alaska 99801

Western Regional Resource Center
P.O. Box 4-2830
Anchorage, Alaska 99509